

REPLACEMENT SHEET



FIG.1A

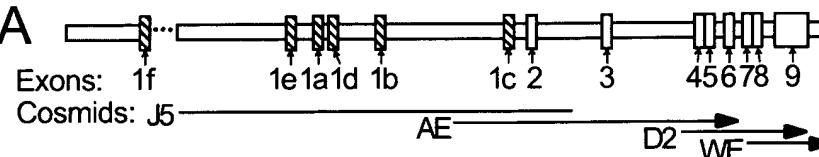
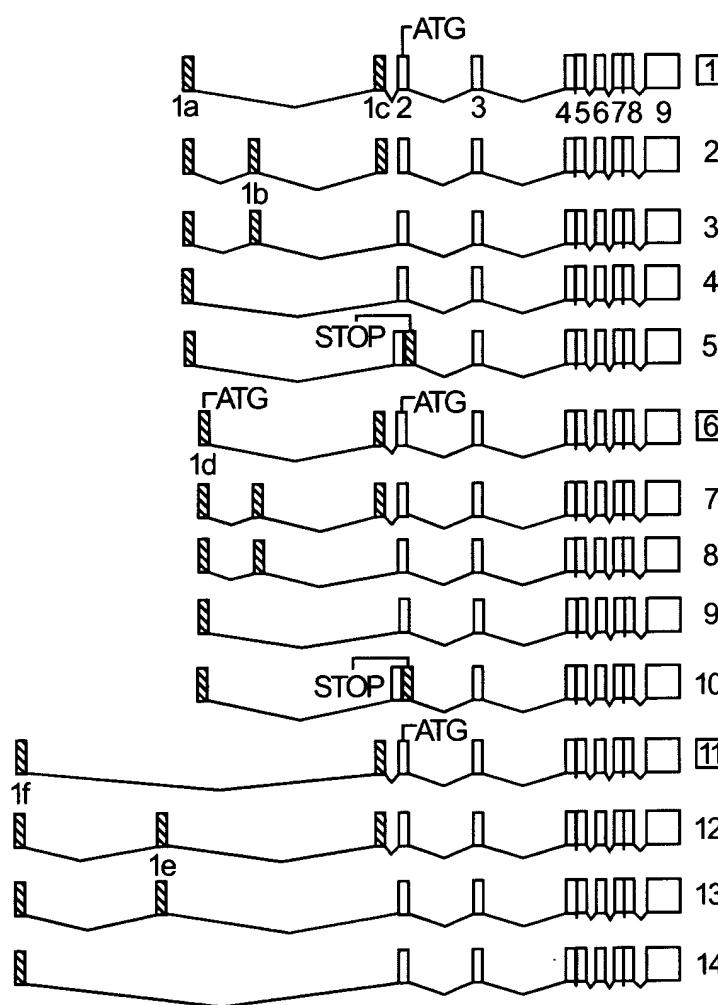
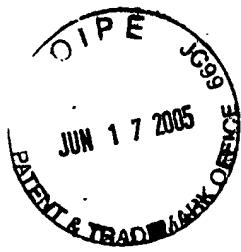


FIG.1B





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FIG. 1C

(SEQ ID NO.14)

Transcript 1:
Transcript 6: MEWRNKKRSDWLSMVLRTAGVEEAFGSEVSVRPHRRAPLGSYTLPPAPSGMEAMAASTSLPDPGD
Transcript 9: MEWRNKKRSDWLSMVLRTAGVEEAFGSEVSVRPHRRAPLGSYTLPPAPSGMEAMAASTSLPDPGD
FDRNVPRIDBD427aa

MEAMAASTSLPDPGD FDRNVPRIDBD427aa
MEAMAASTSLPDPGD FDRNVPRIDBD477aa
MEAMAASTSLPDPGD FDRNVPRIDBD450aa

(SEQ ID NO.16)

(SEQ ID NO.15)

Title: "ISOFORMS OF THE HUMAN VITAMIN D
RECEPTOR"
Inventor: LINDA ANNE CROFTS, ET AL.
Application No.: 09/509,482
Atty. Docket No.: RICE-014

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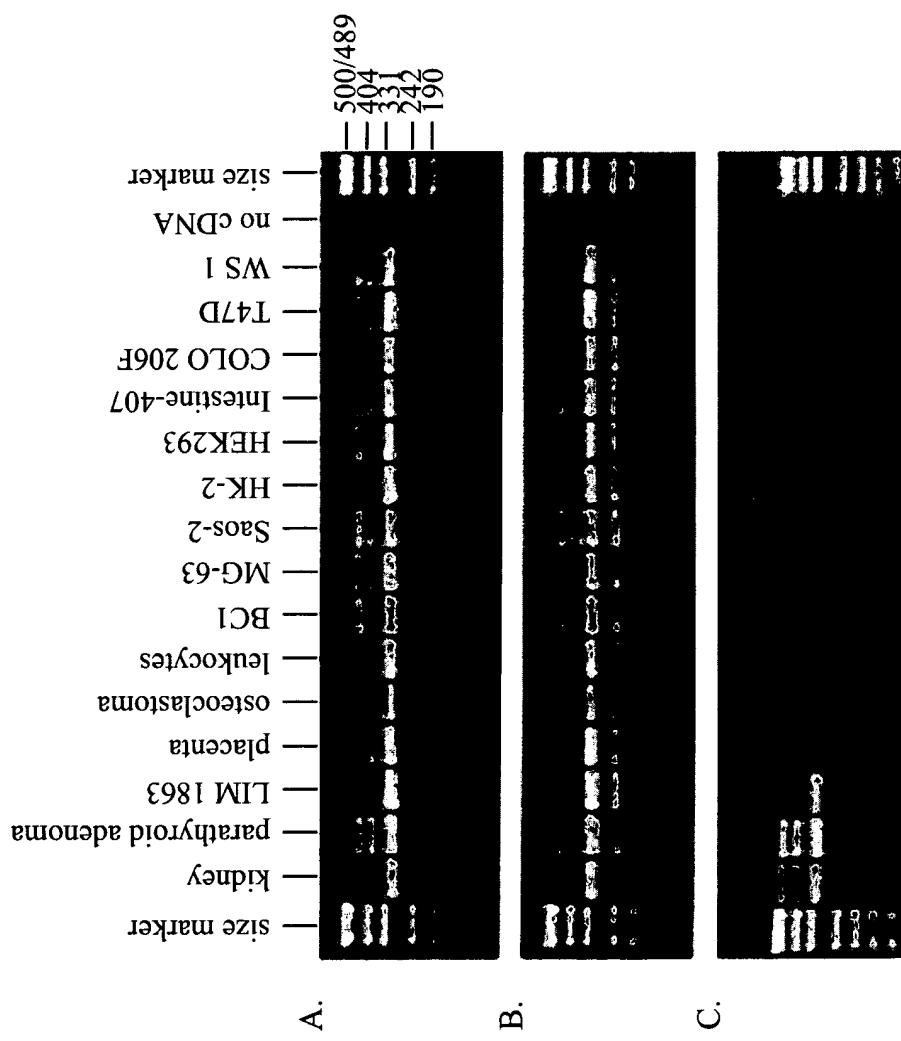
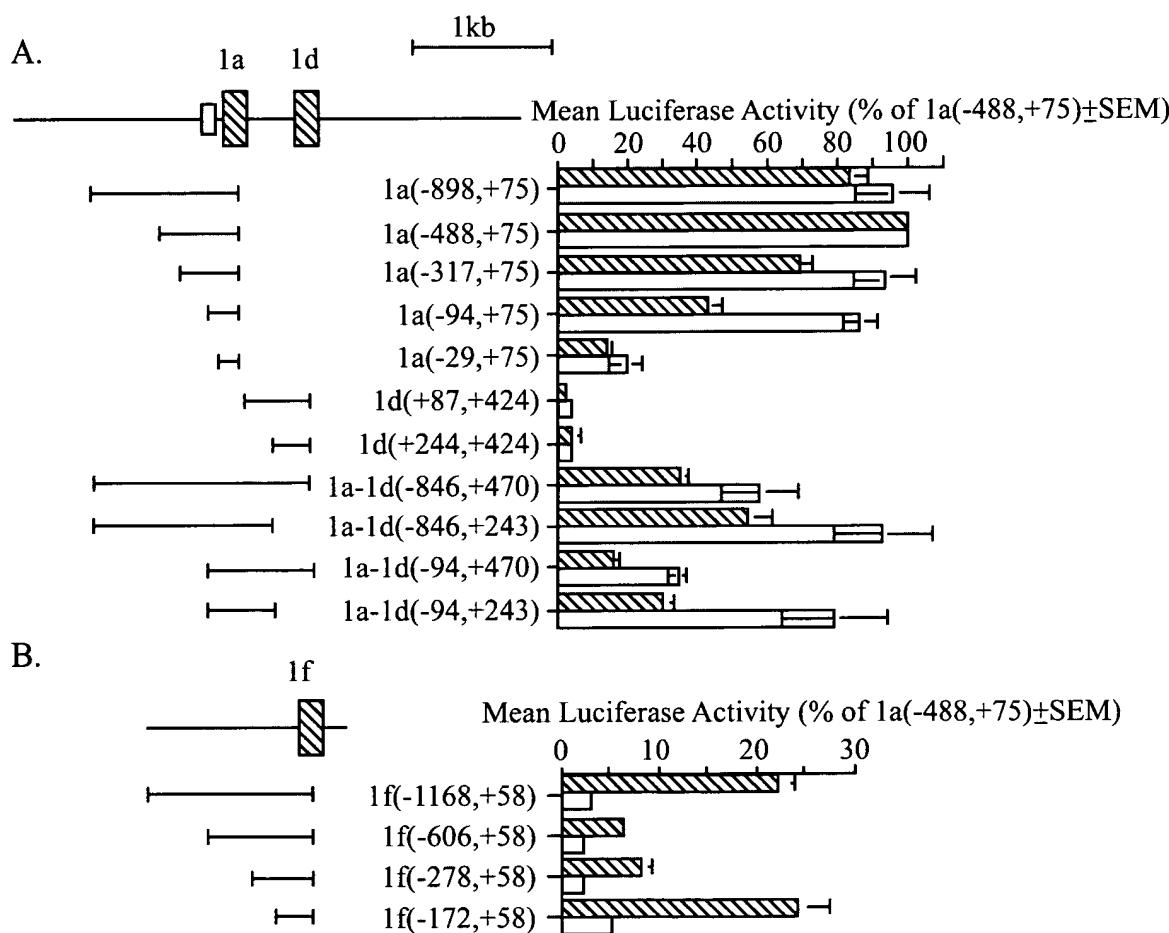


FIG. 2

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FIG. 3



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FIG. 4

- A. 5'...atcccttaag GGCTCCTGAACCTAGGCCAGCTGGACGGAG
AAATGGACTCTAGCCTCCTGTAGCCTCATGCCAGGCC
CGTGCACATTGCTTGCTGCCTCCCTCAATCCTCATAGCT
TCTCTTGGGgttaagtacag...3' (SEQ ID NO: 13)

- B. 5'..T GCGACCTTGGGGGTGAGCCTGGGACAGGGGTGAGGC
CAGAGACGGAOGGACGCAGGGCCGGCCAAGGOGAGGG
AGAACAGCGGCACTAAGGCAGAAAGGAAGAGGGCGGTGTG
TTCACCCGCAGCCCAATCCATCACTCAGCAACTCCTAGAC
GCTGGTAGAAAGTTCTCCGAGQAGCCTGCCATCCAGTOGT
GCGTGCAG...3' (SEQ ID NO: 5)

- C. 5'...tgtttttag AGGCAGCATGAAACAGTGGATGTGCAGAG
AGAAGATCTGGGTCCAGTAGCTCTGACACTCCTCAGCTGT
AGAACCTTGACAACCTGCACATCAGTTGTACAATGGAA
CGGTATTTTACTCTTCATGCTCTGAAAAGGCTATGATAA
AGATCAAgttaagatatt...3' (SEQ ID NO: 6)

- D. 5'..GTTTCCCTCTTCTGTCGGGGCGCCTGGC ATGGAGTGG
AGGAATAAGAAAAGGAGCGATTGGCTGCGATGGGTGCTCA
GAAC TGCTGGAGTGGAGGgtgtgtacc...3' (SEQ ID NO: 22)

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FIG. 5A

Transcript 6

(Sequence Range: 1 to 1463)

10 20 30 40 50

* * * * *

GTTCCTTCT TCTGTCGGGG CGCCTGGCA TGGAGTGGAG GAATAAGAAA
 CAAAGGAAGA AGACAGCCCC GCGGAACCGT ACCTCACCTC CTTATTCTTT
 MetGluTrpArg AsnLysLys>

60 70 80 90 100

* * * * *

AGGAGCGATT GGCTGTCGAT GGTGCTCAGA ACTGCTGGAG TGGAGGAAGC
 TCCTCGCTAA CCGACAGCTA CCACGAGTCT TGACGACCTC ACCTCCTTCG
 ArgSerAsp TrpLeuSerMet ValLeuArg ThrAlaGly ValGluGluAla>

110 120 130 140 150

* * * * *

CTTTGGGTCT GAAAGTGTCTG TGAGACCTCA CAGAAGAGCA CCCCTGGGCT
 GAAACCCAGA CTTCACAGAC ACTCTGGAGT GTCTTCTCGT GGGGACCCGA
 PheGlySer GluValSer ValArgProHis ArgArgAla ProLeuGly>

160 170 180 190 200

* * * * *

CCACTTACCT GCCCCCTGCT CCTTCAGGGGA TGGAGGCAAT GGCGGCCAGC
 GGTGAATGGGA CGGGGGACGA GGAAGTCCCT ACCTCCGTTA CCGCCGGTCG
 SerThrTyrLeu ProProAla ProSerGly MetGluAlaMet AlaAlaSer>

210 220 230 240 250

* * * * *

ACTTCCCTGC CTGACCCCTGG AGACTTTGAC CGGAACGTGC CCCGGATCTG
 TGAAGGGACG GACTGGGACC TCTGAAACTG GCCTTGCACG GGGCCTAGAC
 ThrSerLeu ProAspProGly AspPheAsp ArgAsnVal ProArgIleCys>

260 270 280 290 300

* * * * *

TGGGGTGTGT GGAGACCGAG CCACTGGCTT TCACTTCAAT GCTATGACCT
 ACCCCACACA CCTCTGGCTC GGTGACCGAA AGTGAAGTTA CGATACTGGA
 GlyValCys GlyAspArg AlaThrGlyPhe HisPheAsn AlaMetThr>

310 320 330 340 350

* * * * *

GTGAAGGCTG CAAAGGCTTC TTCAAGGCGAA GCATGAAGCG GAAGGCACTA
 CACTTCCGAC GTTTCCGAAG AAGTCCGCTT CGTACTTCGC CTTCCGTGAT
 CysGluGlyCys LysGlyPhe PheArgArg SerMetLysArg LysAlaLeu>

360 370 380 390 400

* * * * *

TTCACCTGCC CCTTCAACCGG GGACTGCCGC ATCACCAAGG ACAACCGACG
 AAGTGGACGG GGAAGTTGCC CCTGACGGCG TAGTGGTCC TGTTGGCTGC
 PheThrCys ProPheAsnGly AspCysArg IleThrLys AspAsnArgArg>

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FIG. 5B

410 420 430 440 450

* * * * *
CCACTGCCAG GCCTGCCGGC TCAAAACGCTG TGTGGACATC GGCATGATGA
GGTGACGGTC CGGACGGCCG AGTTTGCAC ACACCTGTAG CCGTACTACT
HisCysGln AlaCysArg LeuLysArgCys ValAspIle GlyMetMet>

460 470 480 490 500

* * * * *
AGGAGTTCAT TCTGACAGAT GAGGAAGTGC AGAGGAAGCG GGAGATGATC
TCCTCAAGTA AGACTGTCTA CTCCTTCACG TCTCCTTCGC CCTCTACTAG
LysGluPheIle LeuThrAsp GluGluVal GlnArgLysArg GluMetIle>

510 520 530 540 550

* * * * *
CTGAAGCGGA AGGAGGAGGA GGCCTGAAG GACAGTCTGC GGCCCAGCT
GACTTCGCCT TCCTCCCTC CCGGAACCTC CTGTCAGACG CCGGGTTCGA
LeuLysArg LysGluGluGlu AlaLeuLys AspSerLeu ArgProLysLeu>

560 570 580 590 600

* * * * *
GTCTGAGGAG CAGCAGCGCA TCATTGCCAT ACTGCTGGAC GCCCACCATA
CAGACTCCTC GTCGTCGCGT AGTAACGGTA TGACGACCTG CGGGTGGTAT
SerGluGlu GlnGlnArg IleIleAlaIle LeuLeuAsp AlaHisHis>

610 620 630 640 650

* * * * *
AGACCTACGA CCCCACCTAC TCCGACTTCT GCCAGTTCCG GCCTCCAGTT
TCTGGATGCT GGGGTGGATG AGGCTGAAGA CGGTCAAGGC CGGAGGTCAA
LysThrTyrAsp ProThrTyr SerAspPhe CysGlnPheArg ProProVal>

660 670 680 690 700

* * * * *
CGTGTGAATG ATGGTGGAGG GAGCCATCCT TCCAGGCCA ACTCCAGACA
GCACACTTAC TACCACCTCC CTCGGTAGGA AGGTCCGGGT TGAGGTCTGT
ArgValAsn AspGlyGlyGly SerHisPro SerArgPro AsnSerArgHis>

710 720 730 740 750

* * * * *
CACTCCCAGC TTCTCTGGGG ACTCCTCCTC CTCCTGCTCA GATCACTGTA
GTGAGGGTCG AAGAGACCCC TGAGGAGGAG GAGGACGAGT CTAGTGACAT
ThrProSer PheSerGly AspSerSerSer SerCysSer AspHisCys>

760 770 780 790 800

* * * * *
TCACCTCTTC AGACATGATG GACTCGTCCA GCTTCTCCAA TCTGGATCTG
AGTGGAGAAG TCTGTACTAC CTGAGCAGGT CGAAGAGGTT AGACCTAGAC
IleThrSerSer AspMetMet AspSerSer SerPheSerAsn LeuAspLeu>

810 820 830 840 850

* * * * *
AGTGAAGAAG ATTCAAGATGA CCCTTCTGTG ACCCTAGAGC TGTCCCAGCT
TCACCTCTTC TAAGTCTACT GGGAAAGACAC TGGGATCTCG ACAGGGTCGA
SerGluGlu AspSerAspAsp ProSerVal ThrLeuGlu LeuSerGlnLeu>

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FIG. 5C



860 870 880 890 900
* * * * * * * * * *
CTCCATGCTG CCCCCACCTGG CTGACCTGGT CAGTTACAGC ATCCAAAAGG
GAGGTACGAC GGGGTGGACC GACTGGACCA GTCAATGTG TAGGTTTCC
SerMetLeu ProHisLeu AlaAspLeuVal SerTyrSer IleGlnLys>

910 920 930 940 950
* * * * * * * * * *
TCATTGGCTT TGCTAAGATG ATACCAGGAT TCAGAGACCT CACCTCTGAG
AGTAACCGAA ACGATTCTAC TATGGTCCTA AGTCTCTGGA GTGGAGACTC
ValIleGlyPhe AlaLysMet IleProGly PheArgAspLeu ThrSerGlu>

960 970 980 990 1000
* * * * * * * * * *
GACCAGATCG TACTGCTGAA GTCAAGTGCC ATTGAGGTCA TCATGTTGCG
CTGGTCTAGC ATGACGACTT CAGTTCACGG TAACTCCAGT AGTACAACGC
AspGlnIle ValLeuLeuLys SerSerAla IleGluVal IleMetLeuArg>

1010 1020 1030 1040 1050
* * * * * * * * * *
CTCCAATGAG TCCTTCACCA TGGACGACAT GTCCTGGACC TGTGGCAACC
GAGGTTACTC AGGAAGTGGT ACCTGCTGTA CAGGACCTGG ACACCGTTGG
SerAsnGlu SerPheThr MetAspAspMet SerTrpThr CysGlyAsn>

1060 1070 1080 1090 1100
* * * * * * * * * *
AAGACTACAA GTACCGCGTC AGTGACGTGA CCAAAGCCGG ACACAGCCTG
TTCTGATGTT CATGGCGCAG TCACTGCACT GGTTTCGGCC TGTGTCGGAC
GlnAspTyrLys TyrArgVal SerAspVal ThrLysAlaGly HisSerLeu>

1110 1120 1130 1140 1150
* * * * * * * * * *
GAGCTGATTG AGCCCCTCAT CAAGTTCCAG GTGGGACTGAG AGAACGCTGAA
CTCGACTAAC TCGGGGAGTA GTTCAAGGTC CACCCCTGACT TCTTCGACTT
GluLeuIle GluProLeuIle LysPheGln ValGlyLeu LysLysLeuAsn>

1160 1170 1180 1190 1200
* * * * * * * * * *
CTTGCATGAG GAGGAGCATG TCCTGCTCAT GGCCATCTGC ATCGTCTCCC
GAACGTACTC CTCCTCGTAC AGGACGAGTA CCGGTAGACG TAGCAGAGGG
LeuHisGlu GluGluHis ValLeuLeuMet AlaIleCys IleValSer>

1210 1220 1230 1240 1250
* * * * * * * * * *
CAGATCGTCC TGGGGTGCAG GACGCCGCGC TGATTGAGGC CATCCAGGAC
GTCTAGCAGG ACCCCACGTC CTGGGGCGCG ACTAACTCCG GTAGGTCTG
ProAspArgPro GlyValGln AspAlaAla LeuIleGluAla IleGlnAsp>

1260 1270 1280 1290 1300
* * * * * * * * * *
CGCCTGTCCA ACACACTGCA GACGTACATC CGCTGCCGCC ACCCGCCCC
GCGGACAGGT TGTGTGACGT CTGCATGTAG GCGACGGCGG TGGGCGGGGG
ArgLeuSer AsnThrLeuGln ThrTyrIle ArgCysArg HisProProPro>

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FIG. 5D

1310 1320 1330 1340 1350
* * * * * * * *
GGGCAGCCAC CTGCTCTATG CCAAGATGAT CCAGAACGCTA GCCGACCTGC
CCCGTCGGTG GACGAGATAC GGTTCTACTA GGTCTTCGAT CGGCTGGACG
GlySerHis LeuLeuTyr AlaLysMetIle GlnLysLeu AlaAspLeu>

1360 1370 1380 1390 1400
* * * * * * * *
GCAGCCTCAA TGAGGAGCAC TCCAAGCAGT ACCGCTGCCT CTCCTTCCAG
CGTCGGAGTT ACTCCTCGTG AGGTTCGTCA TGGCGACGGA GAGGAAGGTC
ArgSerLeuAsn GluGluHis SerLysGln TyrArgCysLeu SerPheGln>

1410 1420 1430 1440 1450
* * * * * * * *
CCTGAGTGCA GCATGAAGCT AACGCCCTT GTGCTCGAAG TGTTTGGCAA
GGACTCACGT CGTACTTCGA TTGCGGGGAA CACGAGCTTC ACAAAACCGTT
ProGluCys SerMetLysLeu ThrProLeu ValLeuGlu ValPheGlyAsn>

1460
* *
TGAGATCTCC TGA (SEQ ID NO:2)
ACTCTAGAGG ACT (SEQ ID NO:17)
GluIleSer ***>(SEQ ID NO:9)

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FIG. 6A

Transcript 9

(Sequence range: 1 to 1382)

10 20 30 40 50
* * * * * * * *
GTTCCTTCT TCTGTCGGGG CGCCTTGGCA TGAGATGGAG GAATAAGAAA
CAAAGGAAGA AGACAGCCCC GCGAACCGT ACCTCACCTC CTTATTCTTT
MetGluTrpArg AsnLysLys>

60 70 80 90 100
* * * * * * * *
AGGAGCGATT GGCTGTCGAT GGTGTCAGA ACTGCTGGAG TGGAGGGAT
TCCTCGCTAA CCGACAGCTA CCACGGTCT TGACGACCTC ACCTCCCCTA
ArgSerAsp TrpLeuSerMet ValLeuArg ThrAlaGly ValGluGlyMet>

110 120 130 140 150
* * * * * * * *
GGAGGCAATG CGGCCAGCA CTTCCCTGCC TGACCCCTGGA GACTTGACC
CCTCCGTTAC CGCCGGTCGT GAAGGGACGG ACTGGGACCT CTGAAACTGG
GluAlaMet AlaAlaSer ThrSerLeuPro AspProGly AspPheAsp>

160 170 180 190 200
* * * * * * * *
GGAACGTGCC CGGGATCTGT GGGGTGTGTG GAGACCGAGC CACTGGCTTT
CCTTGCACGG GCCCTAGACA CCCCACACAC CTCTGGCTCG GTGACCGAAA
ArgAsnValPro ArgIleCys GlyValCys GlyAspArgAla ThrGlyPhe>

210 220 230 240 250
* * * * * * * *
CACTTCAATG CTATGACCTG TGAGGCTGC AAAGGCTTCT TCAGGCAGAG
GTGAAGTTAC GATACTGGAC ACTTCCGACG TTTCCGAAGA AGTCCGCTTC
HisPheAsn AlaMetThrCys GluGlyCys LysGlyPhe PheArgArgSer>

260 270 280 290 300
* * * * * * * *
CATGAAGCCG AAGGCACTAT TCACCTGCC CTTCAACGGG GACTGCCGCA
GTACTTCGCC TTCCGTGATA AGTGGACGGG GAAGTTGCC CTGACGGCGT
MetLysArg LysAlaLeu PheThrCysPro PheAsnGly AspCysArg>

310 320 330 340 350
* * * * * * * *
TCACCAAGGA CAACCGACGC CACTGCCAGG CCTGCCGGCT CAAACGCTGT
AGTGGTTCCCT GTTGGCTGCG GTGACGGTCC GGACGGCCGA GTTTCGACCA
IleThrLysAsp AsnArgArg HisCysGln AlaCysArgLeu LysArgCys>

360 370 380 390 400
* * * * * * * *
GTGGACATCG GCATGATGAA GGAGTTCACT CTGACAGATG AGGAAGTGCA
CACCTGTAGC CGTACTACTT CCTCAAGTAA GACTGTCTAC TCCTTCACCGT
ValAspIle GlyMetMetLys GluPheIle LeuThrAsp GluGluValGln>

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FIG. 6B

410 420 430 440 450
* * * * * * * * * * * * * * * * * * * * * * *
GAGGAAGCGG GAGATGATCC TGAAGCGGAA GGAGGGAGGAG GCCTTGAAGG
CTCCTCGCC CTCTACTAGG ACTTCGCCTT CCTCCTCCTC CGGAACCTCC
ArgLysArg GluMetIle LeuLysArgLys GluGluGlu AlaLeuLys>

460 470 480 490 500
* * * * * * * * * * * * * * * * * * * * * * *
ACAGTCTGCG GCCCAAGCTG TCTGAGGAGC AGCAGCGCAT CATTGCCATA
TGTCAGACGC CGGGTTCGAC AGACTCCTCG TCGTCGCGTA GTAACGGTAT
AspSerLeuArg ProLysLeu SerGluGlu GlnGlnArgIle IleAlaIle>

510 520 530 540 550
* * * * * * * * * * * * * * * * * * * * * * *
CTGCTGGACG CCCACCATAA GACCTACGAC CCCACCTACT CCGACTTCTG
GACGACCTGC GGGTGGTATT CTGGATGCTG GGGTGGATGA GGCTGAAGAC
LeuLeuAsp AlaHisHisLys ThrTyrAsp ProThrTyr SerAspPheCys>

560 570 580 590 600
* * * * * * * * * * * * * * * * * * * * * * *
CCAGTTCCGG CCTCCAGTTC GTGTGAATGA TGGTGGAGGG AGCCATCCTT
GGTCAAGGCC GGAGGTCAAG CACACTTACT ACCACCTCCC TCGGTAGGAA
GlnPheArg ProProVal ArgValAsnAsp GlyGlyGly SerHisPro>

610 620 630 640 650
* * * * * * * * * * * * * * * * * * * * * * *
CCAGGGCCAA CTCCAGACAC ACTCCCAGCT TCTCTGGGA CTCCTCCTCC
GGTCCGGTT GAGGTCTGTG TGAGGGTCGA AGAGACCCCT GAGGAGGAGG
SerArgProAsn SerArgHis ThrProSer PheSerGlyAsp SerSerSer>

660 670 680 690 700
* * * * * * * * * * * * * * * * * * * * * * *
TCCTGCTCAG ATCACTGTAT CACCTCTTCA GACATGATGG ACTCGTCCAG
AGGACGAGTC TAGTGACATA GTGGAGAAAGT CTGTACTACC TGAGCAGGTC
SerCysSer AspHisCysIle ThrSerSer AspMetMet AspSerSerSer>

710 720 730 740 750
* * * * * * * * * * * * * * * * * * * * * * *
CTTCTCCAAT CTGGATCTGA GTGAAGAAGA TTCAGATGAC CCTTCTGTGA
GAAGAGGTTA GACCTAGACT CACTCTTCT AAGTCTACTG GGAAGACACT
PheSerAsn LeuAspLeu SerGluGluAsp SerAspAsp ProSerVal>

760 770 780 790 800
* * * * * * * * * * * * * * * * * * * * * * *
CCCTAGAGCT GTCCCAGCTC TCCATGCTGC CCCACCTGGC TGACCTGGTC
GGGATCTCGA CAGGGTCCAG AGGTACGACG GGGTGGACCG ACTGGACCAG
ThrLeuGluLeu SerGlnLeu SerMetLeu ProHisLeuAla AspLeuVal>

810 820 830 840 850
* * * * * * * * * * * * * * * * * * * * * * *
AGTTACAGCA TCCAAAAGGT CATTGGCTTT GCTAAGATGA TACCAGGATT
TCAATGTCGT AGGTGTTCCA GTAACCGAAA CGATTCTACT ATGGTCCTAA
SerTyrSer IleGlnLysVal IleGlyPhe AlaLysMet IleProGlyPhe>

REPLACEMENT SHEET



FIG. 6C

860 870 880 890 900
* * * * * * * * * * * * * * * * * * * *
CAGAGACCTC ACCTCTGAGG ACCAGATCGT ACTGCTGAAG TCAAGTGCCA
GTCTCTGGAG TGGAGACTCC TGGTCTAGCA TGACGACTTC AGTTCACGGT
ArgAspLeu ThrSerGlu AspGlnIleVal LeuLeuLys SerSerAla>

910 920 930 940 950
* * * * * * * * * * * * * * * * * * * *
TTGAGGTCAT CATGTTGCGC TCCAATGAGT CCTTCACCAT GGACGACATG
AACTCCAGTA GTACAACGCG AGGTTACTCA GGAAGTGGTA CCTGCTGTAC
IleGluValIle MetLeuArg SerAsnGlu SerPheThrMet AspAspMet>

960 970 980 990 1000
* * * * * * * * * * * * * * * * * * * *
TCCTGGACCT GTGGCAACCA AGACTACAAG TACCGCGTCA GTGACGTGAC
AGGACCTGGA CACCGTTGGT TCTGATGTTC ATGGCGCAGT CACTGCACGT
SerTrpThr CysGlyAsnGln AspTyrLys TyrArgVal SerAspValThr>

1010 1020 1030 1040 1050
* * * * * * * * * * * * * * * * * * * *
CAAAGCCGGA CACAGCCTGG AGCTGATTGA GCCCCTCATC AAGTCCAGG
GTTTCGGCCT GTGTCGGACC TCGACTAACT CGGGGAGTAG TTCAAGGTCC
LysAlaGly HisSerLeu GluLeuIleGlu ProLeuIle LysPheGln>

1060 1070 1080 1090 1100
* * * * * * * * * * * * * * * * * * * *
TGGGACTGAA GAAGCTGAAC TTGCATGAGG AGGAGCATGT CCTGCTCATG
ACCCCTGACTT CTTCGACTTG AACGTACTCC TCCTCGTACA GGACGAGTAC
ValGlyLeuLys LysLeuAsn LeuHisGlu GluGluHisVal LeuLeuMet>

1110 1120 1130 1140 1150
* * * * * * * * * * * * * * * * * * * *
GCCATCTGCA TCGTCTCCCC AGATCGTCCT GGGGTGCAGG ACGCCGCGCT
CGGTAGACGT AGCAGAGGGG TCTAGCAGGA CCCCACGTCC TGCGCGCGA
AlaIleCys IleValSerPro AspArgPro GlyValGln AspAlaAlaLeu>

1160 1170 1180 1190 1200
* * * * * * * * * * * * * * * * * * * *
GATTGAGGCC ATCCAGGACC GCCTGTCCAA CACACTGCAG ACGTACATCC
CTAACTCCGG TAGGTCTGG CGGACAGGTT GTGTGACGTC TGCATGTAGG
IleGluAla IleGlnAsp ArgLeuSerAsn ThrLeuGln ThrTyrIle>

1210 1220 1230 1240 1250
* * * * * * * * * * * * * * * * * * * *
GCTGCCGCCA CCCGCCCCCG GGCAGCCACC TGCTCTATGC CAAGATGATC
CGACGGCGGT GGGCGGGGGC CCGTCGGTGG ACGAGATACG GTTCTACTAG
ArgCysArgHis ProProPro GlySerHis LeuLeuTyrAla LysMetIle>

1260 1270 1280 1290 1300
* * * * * * * * * * * * * * * * * * * *
CAGAACGCTAG CCGACCTGCG CAGCCTCAAT GAGGAGCACT CCAAGCAGTA
GTCTTCGATC GGCTGGACGC GTCGGAGTTA CTCCTCGTGA GGTCGTCAT
GlnLysLeu AlaAspLeuArg SerLeuAsn GluGluHis SerLysGlnTyr>

Title: "ISOFORMS OF THE HUMAN VITAMIN D
RECEPTOR"
Inventor: LINDA ANNE CROFTS, ET AL.
Application No.: 09/509,482
Atty. Docket No.: RICE-014

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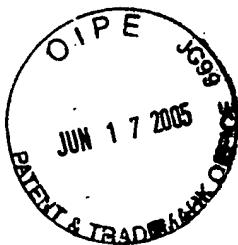


FIG. 6D

1310 1320 1330 1340 1350
* * * * * * *
CCGCTGCCTC TCCTTCAGC CTGAGTGCAG CATGAAGCTA ACGCCCCTTG
GGCGACGGAG AGGAAGGTCG GACTCACGTC GTACTTCGAT TGCGGGGAAAC
ArgCysLeu SerPheGln ProGluCysSer MetLysLeu ThrProLeu>

1360 1370 1380
* * * * * *
TGCTCGAAGT GTTTGCAAT GAGATCTCCT GA (SEQ ID NO:3)
ACGAGCTTCA CAAACCGTTA CTCTAGAGGA CT (SEQ ID NO:18)
ValLeuGluVal PheGlyAsn GluIleSer ***> (SEQ ID NO:10)

REPLACEMENT SHEET



FIG. 7A

Transcript 10
(Sequence Range: 1 to 1534)

10	20	30	40	50
*	*	*	*	*
GTTTCCTTCT TCTGTCGGGG CGCCTTGGCA TGAGGTGGAG GAATAAGAAA				
CAAAGGAAGA AGACAGCCCC GCGGAACCGT ACCTCACCTC CTTATTCTTT				
MetGluTrpArg AsnLysLys>				
60	70	80	90	100
*	*	*	*	*
AGGAGCGATT GGCTGTCGAT GGTGCTCAGA ACTGCTGGAG TGGAGGGAT				
TCCTCGCTAA CCGACAGCTA CCACGAGTCT TGACGACCTC ACCTCCCCTA				
ArgSerAsp TrpLeuSerMet ValLeuArg ThrAlaGly ValGluGlyMet>				
110	120	130	140	150
*	*	*	*	*
GGAGGCCAATG GCGGCCAGCA CTTCCCTGCC TGACCCCTGGA GACTTTGACC				
CCTCCGTTAC CGCCGGTCGT GAAGGGACGG ACTGGGACCT CTGAAACTGG				
GluAlaMet AlaAlaSer ThrSerLeuPro AspProGly AspPheAsp>				
160	170	180	190	200
*	*	*	*	*
GGAACGTGCC CCGGATCTGT GGGGTGTGTG GAGACCGAGC CACTGGCTTT				
CCTTGCACGG GGCCTAGACA CCCCACACAC CTCTGGCTCG GTGACCGAAA				
ArgAsnValPro ArgIleCys GlyValCys GlyAspArgAla ThrGlyPhe>				
210	220	230	240	250
*	*	*	*	*
CACTTCATG CTATGACCTG TGAAGGCTGC AAAGGCTTCT TCAGGTGAGC				
GTGAAGTTAC GATACTGGAC ACTTCCGACG TTTCCGAAGA AGTCCACTCG				
HisPheAsn AlaMetThrCys GluGlyCys LysGlyPhe PheArg*** (SEQ ID NO:11)				
260	270	280	290	300
*	*	*	*	*
CCCCCTCCCA GGCTCTCCCC AGTGGAAAGG GAGGGAGAAG AAGCAAGGTG				
GGGGGAGGGT CCGAGAGGGG TCACCTTCC CTCCCTCTTC TTGACCTTCCAC				
310	320	330	340	350
*	*	*	*	*
TTTCCATGAA GGGAGCCCTT GCATTTTCA CATCTCCTTC CTTACAATGT				
AAAGGTACTT CCCTCGGGAA CGTAAAAAGT GTAGAGGAAG GAATGTTACA				
360	370	380	390	400
*	*	*	*	*
CCATGGAACA TGCGGGCGCTC ACAGCCACAG GAGCAGGAGG GTCTTGGCGA				
GGTACCTTGT ACGCCGCGAG TGTCGGTGTC CTCGTCCTCC CAGAACCGCT				

REPLACEMENT SHEET



FIG. 7B

410 420 430 440 450
* * * * * * * * * *
AGCATGAAGC GGAAGGCACT ATTACACCTGC CCCTTCAACG GGGACTGCCG
TCGTACTTCG CCTTCCGTGA TAAGTGGACG GGGAAAGTTGC CCCTGACGGC

460 470 480 490 500
* * * * * * * * * *
CATCACCAAG GACAACCGAC GCCACTGCCA GGCCTGCCGG CTCAAACGCT
GTAGTGGTTC CTGTTGGCTG CGGTGACGGT CCGGACGGCC GAGTTTGCAG

510 520 530 540 550
* * * * * * * * * *
GTGTGGACAT CGGCATGATG AAGGAGTTCA TTCTGACAGA TGAGGAAGTG
CACACCTGTA GCCGTACTAC TTCCTCAAGT AAGACTGTCT ACTCCTTCAC

560 570 580 590 600
* * * * * * * * * *
CAGAGGAAGC GGGAGATGAT CCTGAAGCGG AAGGAGGAGG AGGCCTTGAA
GTCTCCTTCG CCCTCTACTA GGACTTCGCC TTCCCTCTCC TCCGGAACATT

610 620 630 640 650
* * * * * * * * * *
GGACAGTCTG CGGCCCAAGC TGTCTGAGGA GCAGCAGGCC ATCATGCCA
CCTGTCAGAC GCCGGGTTCG ACAGACTCCT CGTCGTCGCG TAGTAACGGT

660 670 680 690 700
* * * * * * * * * *
TACTGCTGGA CGCCCACCAT AAGACCTACG ACCCCACCTA CTCCGACTTC
ATGACGACCT GCGGGTGGTA TTCTGGATGC TGGGGTGGAT GAGGCTGAAG

710 720 730 740 750
* * * * * * * * * *
TGCCAGTTCC GGCCCTCCAGT TCGTGTGAAT GATGGTGGAG GGAGCCATCC
ACGGTCAAGG CCGGAGGTCA AGCACACTTA CTACCACCTC CCTCGGTAGG

760 770 780 790 800
* * * * * * * * * *
TTCCAGGCC AACTCCAGAC ACACCTCCAG CTTCTCTGGG GACTCCTCCT
AAGGTCCGGG TTGAGGTCTG TGTGAGGGTC GAAGAGACCC CTGAGGAGGA

810 820 830 840 850
* * * * * * * * * *
CCTCCTGCTC AGATCACTGT ATCACCTCTT CAGACATGAT GGACTCGTCC
GGAGGACGAG TCTAGTGACA TAGTGGAGAA GTCTGTACTA CCTGAGCAGG

860 870 880 890 900
* * * * * * * * * *
AGCTTCTCCA ATCTGGATCT GAGTGAAGAA GATTCAAGATG ACCCTTCTGT
TCGAAGAGGT TAGACCTAGA CTCACTTCTT CTAAGTCTAC TGGGAAGACA

910 920 930 940 950
* * * * * * * * * *
GACCCTAGAG CTGTCCCAGC TCTCCATGCT GCCCCACCTG GCTGACCTGG
CTGGGATCTC GACAGGGTCG AGAGGTACGA CGGGGTGGAC CGACTGGACC

REPLACEMENT SHEET



FIG. 7C

960 970 980 990 1000

TCAGTTACAG CATCCAAAAG GTCATTGGCT TTGCTAACAGAT GATACCAGGA
AGTCAATGTC GTAGGTTTC CAGTAACCGA AACGATTCTA CTATGGTCCT

1010 1020 1030 1040 1050

TTCAGAGACC TCACCTCTGA GGACCAGATC GTACTGCTGA AGTCAAGTGC
AAGTCTCTGG AGTGGAGACT CCTGGTCTAG CATGACGACT TCAGTTCACG

1060 1070 1080 1090 1100

CATTGAGGTC ATCATGTTGC GCTCCAATGA GTCCCTTCACC ATGGACGACA
GTAACTCCAG TAGTACAACG CGAGGTTACT CAGGAAGTGG TACCTGCTGT

1110 1120 1130 1140 1150

TGTCCCTGGAC CTGTGGCAAC CAAGACTACA AGTACCGCGT CAGTGACGTG
ACAGGACCTG GACACCGTTG GTTCTGATGT TCATGGCGCA GTCACTGCAC

1160 1170 1180 1190 1200

ACCAAAGCCG GACACAGCCT GGAGCTGATT GAGCCCCCTCA TCAAGTTCCA
TGGTTTCGGC CTGTGTCGGA CCTCGACTAA CTCGGGGAGT AGTTCAAGGT

1210 1220 1230 1240 1250

GGTGGGACTG AAGAAGCTGA ACTTGCATGA GGAGGAGCAT GTCCTGCTCA
CCACCCCTGAC TTCTTCGACT TGAACGTACT CCTCCTCGTA CAGGACGAGT

1260 1270 1280 1290 1300

TGGCCATCTG CATCGTCTCC CCAGATCGTC CTGGGGTGCA GGACGCCGCG
ACCGGTAGAC GTAGCAGAGG GGTCTAGCAG GACCCCACGT CCTGCCGGCGC

1310 1320 1330 1340 1350

CTGATTGAGG CCATCCAGGA CCGCCTGTCC AACACACTGC AGACGTACAT
GACTAACTCC GGTAGGTCTT GGCGGACAGG TTGTGTGACG TCTGCATGTA

1360 1370 1380 1390 1400

CCGCTGCCGC CACCCGCCGC CGGGCAGCCA CCTGCTCTAT GCCAAGATGA
GGCGACGGCG GTGGGGGGGG GCCCCGTCGGT GGACGAGATA CGGTTCTACT

1410 1420 1430 1440 1450

TCCAGGAAGCT AGCCGACCTG CGCAGCCTCA ATGAGGGAGCA CTCCAAGCAG
AGGTCTTCGA TCGGCTGGAC GCGTCGGAGT TACTCCTCGT GAGGTTCGTC

1460 1470 1480 1490 1500

TACCGCTGCC TCTCCTTCCA GCCTGAGTGC AGCATGAAGC TAACGCCCT
ATGGCGACGG AGAGGAAGGT CGGACTCACG TCGTACTTCG ATTGCGGGGA

Title: "ISOFORMS OF THE HUMAN VITAMIN D RECEPTOR"

Inventor: LINDA ANNE CROFTS, ET AL.

Application No.: 09/509,482

Atty. Docket No.: RICE-014

REPLACEMENT SHEET



FIG. 7D

1510 1520 1530

* * *

TGTGCTCGAA GTGTTGGCA ATGAGATCTC CTGA (SEQ ID NO:4)
ACACGAGCTT CACAAACCGT TACTCTAGAG GACT (SEQ ID NO:19)

REPLACEMENT SHEET

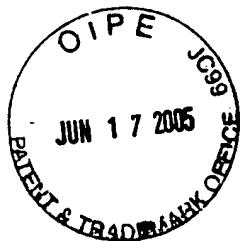


FIG. 8A

10	20	30	40	50
*	*	*	*	*
TGCAGACCTTG GCGGTGAGCC TGGGGACAGG GGTGAGGCCA GAGACGGACG				
ACGCTGGAAC CGCCACTCGG ACCCCCTGTCC CCACCTCCGGT CTCTGCCTGC				
60	70	80	90	100
*	*	*	*	*
GACGCAGGGG CCCGGCCCAA GGCAGGGAG AACAGCGGCA CTAAGGCAGA				
CTGCGTCCCC GGGCCGGGTT CCGCTCCCTC TTGTCGCCGT GATTCCGTCT				
110	120	130	140	150
*	*	*	*	*
AAGGAAGAGG GCGGTGTGTT CACCCGCAGC CCAATCCATC ACTCAGCAAC				
TTCCTTCTCC CGCCACACAA GTGGCGTCG GGTTAGGTAG TGAGTCGTTG				
160	170	180	190	200
*	*	*	*	*
TCCTAGACGC TGGTAGAAAG TTCCCTCCGAG GAGCCTGCCA TCCAGTCGTG				
AGGATCTGCG ACCATCTTC AAGGAGGCTC CTCGGACGGT AGGTCAAGCAC				
210	220	230	240	250
*	*	*	*	*
CGTGCAGAAC CCTTTGGGTC TGAAGTGTCT GTGAGACCTC ACAGAACAGC				
GCACGTCTTC GGAAACCCAG ACTTCACAGA CACTCTGGAG TGTCTTCTCG				
260	270	280	290	300
*	*	*	*	*
ACCCCTGGGC TCCACTTACC TGCCCCCTGC TCCTTCAGGG ATGGAGGCAA				
TGGGGACCCG AGGTGAATGG ACGGGGGACG AGGAAGTCCC TACCTCCGTT				
MetGluAla>				
310	320	330	340	350
*	*	*	*	*
TGGCGGCCAG CACTTCCCTG CCTGACCTG GAGACTTGA CCGAACGTG				
ACCGCCGGTC GTGAAGGGAC GGACTGGAC CTCTGAAACT GGCCTTGCAC				
MetAlaAlaSer ThrSerLeu ProAspPro GlyAspPheAsp ArgAsnVal>				
360	370	380	390	400
*	*	*	*	*
CCCCGGATCT GTGGGGTGTG TGGAGACCGA GCCACTGGCT TTCACTTCAA				
GGGGCCTAGA CACCCACAC ACCTCTGGCT CGGTGACCGA AAGTGAAGTT				
ProArgIle CysGlyValCys GlyAspArg AlaThrGly PheHisPheAsn>				
410	420	430	440	450
*	*	*	*	*
TGCTATGACC TGTGAAGGCT GCAAAGGCTT CTTCAGGCCA AGCATGAAGC				
ACGATACTGG ACACCTCCGA CGTTTCCGAA GAAGTCCGCT TCGTACTTCG				
AlaMetThr CysGluGly CysLysGlyPhe PheArgArg SerMetLys>				
460	470	480	490	500
*	*	*	*	*
GGAAGGCAGT ATTACACCTGC CCCTCAACG GGGACTGCCG CATCACCAAG				
CCTTCCTGTGA TAAGTGGACG GGGAAAGTTGC CCCTGACGGC GTAGTGGTTC				
ArgLysAlaLeu PheThrCys ProPheAsn GlyAspCysArg IleThrLys>				

REPLACEMENT SHEET

FIG. 8B

510 520 530 540 550
* * * * *

GACAACCGAC GCCACTGCCA GGCCTGCCGG CTCAAACGCT GTGTGGACAT
CTGTTGGCTG CGGTGACGGT CCGGACGGCC GAGTTTGCGA CACACCTGTA
AspAsnArg ArgHisCysGln AlaCysArg LeuLysArg CysValAspIle>

560 570 580 590 600
* * * * *

CGGCATGATG AAGGAGTTCA TTCTGACAGA TGAGGAAGTG CAGAGGAAGC
GCCGTACTAC TTCCCTCAAGT AAGACTGTCT ACTCCTTCAC GTCTCCTTCG
GlyMetMet LysGluPhe IleLeuThrAsp GluGluVal GlnArgLys>

610 620 630 640 650
* * * * *

GGGAGATGAT CCTGAAGCGG AAGGAGGAGG AGGCCTTGAA GGACAGTCTG
CCCTCTACTA GGACTTCGCC TTCCTCCTCC TCCGGAACTT CCTGTCAGAC
ArgGluMetIle LeuLysArg LysGluGlu GluAlaLeuLys AspSerLeu>

660 670 680 690 700
* * * * *

CGGCCCAAGC TGTCTGAGGA GCAGCAGCGC ATCATTGCCA TACTGCTGGA
GCCGGGTTCG ACAGACTCCT CGTCGTCGCG TAGTAACGGT ATGACGACCT
ArgProLys LeuSerGluGlu GlnGlnArg IleIleAla IleLeuLeuAsp>

710 720 730 740 750
* * * * *

CGCCCACCAT AAGACCTACG ACCCCACCTA CTCCGACTTC TGCCAGTTCC
GCCGGGTGGTA TTCTGGATGC TGGGGTGGAT GAGGCTGAAG ACGGTCAAGG
AlaHisHis LysThrTyr AspProThrTyr SerAspPhe CysGlnPhe>

760 770 780 790 800
* * * * *

GGCCTCCAGT TCGTGTGAAT GATGGTGGAG GGAGCCATCC TTCCAGGGCCC
CCGGAGGTCA AGCACACTTA CTACCACCTC CCTCGGGTAGG AAGGTCCGGG
ArgProProVal ArgValAsn AspGlyGly GlySerHisPro SerArgPro>

810 820 830 840 850
* * * * *

AACTCCAGAC ACACTCCCAG CTTCTCTGGG GACTCCTCCT CCTCCTGCTC
TTGAGGTCTG TGTGAGGGTC GAAGAGACCC CTGAGGAGGA GGAGGACGAG
AsnSerArg HisThrProSer PheSerGly AspSerSer SerSerCysSer>

860 870 880 890 900
* * * * *

AGATCACTGT ATCACCTCTT CAGACATGAT GGACTCGTCC AGCTTCTCCA
TCTAGTGACA TAGTGGAGAA GTCTGTACTA CCTGAGCAGG TCGAAGAGGT
AspHisCys IleThrSer SerAspMetMet AspSerSer SerPheSer>

910 920 930 940 950
* * * * *

ATCTGGATCT GAGTGAAGAA GATTCAAGATG ACCCTTCTGT GACCCTAGAG
TAGACCTAGA CTCACCTCTT CTAAGTCTAC TGGGAAGACA CTGGGATCTC
AsnLeuAspLeu SerGluGlu AspSerAsp AspProSerVal ThrLeuGlu>

960 970 980 990 1000
* * * * *

CTGTCCCAGC TCTCCATGCT GCCCCACCTG GCTGACCTGG TCAGTTACAG
GACAGGGTCG AGAGGTACGA CGGGGTGGAC CGACTGGACC AGTCAATGTC
LeuSerGln LeuSerMetLeu ProHisLeu AlaAspLeu ValSerTyrSer>



REPLACEMENT SHEET



FIG. 8C

1010 1020 1030 1040 1050
* * * * *
CATCCAAAAG GTCATTGGCT TTGCTAACAGAT GATACCAGGA TTCAGAGACCC
GTAGGTTTTC CAGTAACCGA AACGATTCCTA CTATGGTCCT AAGTCTCTGG
IleGlnLys ValIleGly PheAlaLysMet IleProGly PheArgAsp>

1060 1070 1080 1090 1100
* * * * *
TCACCTCTGA GGACCAGATC GTACTGCTGA AGTCAAGTGC CATTGAGGTC
AGTGGAGACT CCTGGTCTAG CATGACGACT TCAGTTCACG GTAACCTCCAG
LeuThrSerGlu AspGlnIle ValLeuLeu LysSerSerAla IleGluVal>

1110 1120 1130 1140 1150
* * * * *
ATCATGTTGC GCTCCAATGA GTCCTTCACC ATGGACGACA TGTCTGGAC
TAGTACAAACG CGAGGTTACT CAGGAAGTGG TACCTGCTGT ACAGGACCTG
IleMetLeu ArgSerAsnGlu SerPheThr MetAspAsp MetSerTrpThr>

1160 1170 1180 1190 1200
* * * * *
CTGTGGCAAC CAAGACTACA AGTACCGCGT CAGTGACGTG ACCAAAGCCG
GACACCGTTG GTTCTGATGT TCATGGCGCA GTCACTGCAC TGGTTTCGGC
CysGlyAsn GlnAspTyr LysTyrArgVal SerAspVal ThrLysAla>

1210 1220 1230 1240 1250
* * * * *
GACACAGCCT GGAGCTGATT GAGCCCCTCA TCAAGTTCCA GGTGGGACTG
CTGTGTCGGA CCTCGACTAA CTCGGGGAGT AGTTCAAGGT CCACCCCTGAC
GlyHisSerLeu GluLeuIle GluProLeu IleLysPheGln ValGlyLeu>

1260 1270 1280 1290 1300
* * * * *
AAGAACGCTGA ACTTGCATGA GGAGGGACAT GTCCTGCTCA TGGCCATCTG
TTCTTCGACT TGAAACGTACT CCTCCTCGTA CAGGACGAGT ACCGGTAGAC
LysLysLeu AsnLeuHisGlu GluGluHis ValLeuLeu MetAlaIleCys>

1310 1320 1330 1340 1350
* * * * *
CATCGTCTCC CCAGATCGTC CTGGGGTGCA GGACGCCGCG CTGATTGAGG
GTAGCAGAGG GGTCTAGCAG GACCCCACGT CCTGCGCGC GACTAACTCC
IleValSer ProAspArg ProGlyValGln AspAlaAla LeuIleGlu>

1360 1370 1380 1390 1400
* * * * *
CCATCCAGGA CCCCTGTCC AACACACTGC AGACGTACAT CCGCTGCCGC
GGTAGGTCTT GGCAGGACAGG TTGTGTGACG TCTGCATGTA GGCGACGGCG
AlaIleGlnAsp ArgLeuSer AsnThrLeu GlnThrTyrIle ArgCysArg>

1410 1420 1430 1440 1450
* * * * *
CACCCGCCCG CGGGCAGCCA CCTGCTCTAT GCCAAGATGA TCCAGAAGCT
GTGGGGGGGG GCCCGTCGGT GGACGAGATA CGGTTCTACT AGGTCTTCGA
HisProPro ProGlySerHis LeuLeuTyr AlaLysMet IleGlnLysLeu>

1460 1470 1480 1490 1500
* * * * *
AGCCGACCTG CGCAGCCTCA ATGAGGAGCA CTCCAAGCAG TACCGCTGCC
TCGGCTGGAC CGCTCGGAGT TACTCCTCGT GAGGTTCGTC ATGGCGACGG
AlaAspLeu ArgSerLeu AsnGluGluHis SerLysGln TyrArgCys>

Title: "ISOFORMS OF THE HUMAN VITAMIN D
RECEPTOR"
Inventor: LINDA ANNE CROFTS, ET AL.
Application No.: 09/509,482
Atty. Docket No.: RICE-014

REPLACEMENT SHEET



FIG. 8D

1510 1520 1530 1540 1550
* * * *

TCTCCTTCCA GCCTGAGTGC AGCATGAAGC TAACGCCCT TGTGCTCGAA
AGAGGAAGGT CGGACTCACG TCGTACTTCG ATTGCGGGA ACACGAGCTT
LeuSerPheGln ProGluCys SerMetLys LeuThrProLeu ValLeuGlu>

1560 1570
* *

GTGTTGGCA ATGAGATCTC CTGA (SEQ ID NO:7)
CACAAACCGT TACTCTAGAG GACT (SEQ ID NO:20)
ValPheGly AsnGluIleSer ***> (SEQ ID NO:12)